LYNCHBURG CITY COUNCIL Agenda Item Summary

MEETING DATE: April 26, 2005, Work Session AGENDA ITEM NO.: 2

CONSENT: REGULAR: X CLOSED SESSION: (Confidential)

ACTION: X INFORMATION:

ITEM TITLE: Proposal to Develop New Parking Structures Downtown

RECOMMENDATION: Allow the City Manager to pursue the development of new parking structures downtown.

<u>SUMMARY:</u> Concerns about parking in the central business district ("downtown") are longstanding. The <u>Lynchburg Downtown Study</u>, a special report providing background for the 1990 update of the <u>Lynchburg General Plan</u>, documented discussions going back to 1934. (See pages 68 and 69, attached). The study also made certain recommendations regarding the provision of parking, including calling for the construction of new parking structures (see pages 55-57, attached). More recently, the <u>Lynchburg Downtown and Riverfront Plan</u> (the "Sasaki Plan") provided an updated analysis of parking downtown (see Appendix 2, attached) and recommended a number of potential sites for new parking structures (pp. 45-48 of the plan, attached).

In response to anecdotal evidence that the success of downtown redevelopment efforts was raising concerns about adequate parking, Lynch's Landing and the City hosted a meeting of owners/representatives of the major downtown buildings. Buildings represented included The Academy of Fine Arts, the Holiday Inn Select, Genworth, the Appalachian Building, the Bank of America Building, the Allied Arts Building, the Bank of the James Building, Riverviews, Bluffwalk, and City Market Lofts. During the meeting the following points were made:

- The Bank of America parking deck is 100% leased and has a waiting list.
- The City Midtown Deck is 100% leased and has a waiting list.
- There is growing concern about the loss of hourly spaces in parking structures and the impact on on-street parking.
- Employees of businesses located outside of the large buildings with interior decks have lost their deck spaces in favor of building tenants.
- The Bank of the James Building is approaching 70% occupancy and has used up all of its interior parking. It needs approximately 100 more spaces for 90-95% occupancy and several options are being explored.
- The Bluffwalk and City Market Lofts projects will increase parking demand on east Main Street.
- Monthly rates are in the range of \$40-45; compared to \$55-80/month in Roanoke and \$100-120/month in Charlottesville.
- The recruitment of additional businesses downtown may be impacted by parking challenges.
- Several existing parking structures could be added on to; particularly, the Holiday Inn Select and Allied Arts Building decks.
- The private sector is starting to explore the construction of new parking structures but is hindered by the high costs of financing.
- There are various financing mechanisms including private sector funding, public sector funding, general obligation bonds, revenue bonds through a Parking Authority or the IDA, a special taxing district, or a public/private partnership.
- The cost of an individual space in structured parking is in the range of \$10,000-\$20,000, depending on a number of considerations.

At the conclusion of the meeting there was consensus that guarantees could be obtained in short order for the lease of 400 new structured parking spaces at a rent of at least \$50/month. This is the minimum monthly space rental required to amortize the cost of a new structure. It was agreed that City Council would be approached for the authorization to explore the development of at least three new parking structures with a total of at least 400 spaces in the following areas:

- West Main Street: possible locations include the expansion of the Holiday Inn Select parking deck.
- Ninth Street corridor (min. 200 spaces): options include the surface lot adjacent to the Human Services Building on Jefferson Street or several private lots.
- East Main Street: two locations are the Piggley Wiggley and Farmers Feed and Seed lots.

There are three criteria that would be followed in the exploration: 1) Revenue from monthly rentals would cover debt service and operating costs; 2) No buildings would be demolished to make room for a parking structure; 3) Retail space would be provided on the street level of new parking structures.

Staff will seek Council's guidance during the work session discussion.

PRIOR ACTION(S): N/A

<u>FISCAL IMPACT:</u> To be determined. The intent would be for monthly rentals to cover the debt service and operating costs of the structures.

CONTACT(S): Kimball Payne

ATTACHMENT(S): Lynchburg Downtown Study, pp. 55-57, 68 & 69; Lynchburg Downtown and Riverfront Plan, pp. 45-48 & Appendix 2, Parking Survey and Analysis.

REVIEWED BY: Ikp

PARKING

A review was made of the existing on-street and off-street parking for the Central Business District. Exhibit 16 illustrates the existing on-street parking within the Study area, and the number of on-street parking spaces is summarized in Exhibit 15. There are 1,178 on-street parking spaces in the Study area with 86.3 percent of the total being classified as free parking spaces, 11.2 percent as loading spaces, and 2.5 percent as other parking spaces (cabstands, thirty minutes or less). Court Street, Clay Street, Main Street, and Commerce Street provide the major portion of free on-street parking spaces within the Central Business District area.

Exhibit 9

Existing On-Street Parking Within the CBD

Location	Free Parking Spaces	Loading Spaces	Other	Total
Jefferson Street	50	3*	-	53
Commerce Street `	72	49	-	121
Main Street	77	43	-	120.
Church Street	95	18	20	133
Court Street	145	-	-	145
Clay Street	79	3	-	82
Madison Street	45	2	-	47
Harrison Street	40	-	-	40
Federal Street	23	-	-	23
Jackson Street	29	-	5	- 34
Polk Street	45	-	-	45
Monroe Street	43	-	-	43
Fourth Street	55	. -	-	55
Lucado Place	13	· -	-	13
Fifth Street	39	1	2	. 42
Sixth Street	53	-	-	53
Eighth Street	22	3	-	25
Ninth Street	25	8	, 2	35
Tenth Street	13	-	• •	13
Twelfth Street	32	2	-	34
Thirteenth Street	15	-	, -	15
Horseford Road	7	-		7
TOTAL	1,017 (86.3%	132 (11.2%)	29 (2.5%)	1,178 (100%)

*The actual number of loading spaces could not be determined for Jefferson Street due to the fact that in some areas trucks load parallel to the building and others perpendicular.

Off-street parking areas provide the major portion of parking in the Central Business District area. Within the Study area there is a total of 4,087 off-street parking spaces (see Exhibit 10). Approximately 33 percent of the off-street parking areas are located on Commerce Street. Church Street and Court Street, respectively, have a concentration of 18.9 percent and 16.7 percent of the off-street parking spaces. Main Street has the fourth highest concentration of off-street parking spaces with 12.7 percent. The remaining spaces were scattered throughout the study area

Exhibit 10 Number of Off-Street Parking Spaces

Street	Total	Percent
Jefferson Street	104	(2.6)
Commerce Street	1,366	(33.4)
Main Street	520	(12.7)
Fifth Street from Main Street to Church Street	15	(0.4)
Church Street	773	(18.9)
Court Street	684	(16.7)
Fifth Street from Church Street to Court Street	6	(0.2)
Lucado Place from Church Street to Court Street	54	(1.3)
Clay Street, Northside, from Twelfth Street to Lucado Place	316	(7.7)
Clay Street, Southside, from Sixth Street to Lucado Place	40	(1.0)
Madison Street from Sixth Street to Fourth Street	45	(1.1)
Harrison Street from Sixth Street to Fourth Street	24	(0.6)
Federal Street from Sixth Street to Fourth Street	33	(0.8)
Jackson Street from Sixth Street to Fourth Street	49	(1.2)
Polk Street from Sixth Street to Fourth Street	24	(0.6)
Monroe Street from Sixth Street to Fourth Street	34	(0.8)
TOTAL	4,087	100.0%

By combining both the on-street and off-street parking spaces, the Central Business District has a total of 5,265 parking spaces. This calculates out to seventy-nine spaces per 1,000 people of Lynchburg's total population. The seventy-nine parking spaces per 1,000 population compares favorably with the seventy spaces per 1,000 population for U. S. cities with populations between 50,000 - 100,000 people cited in the Special Report No. 125, "Parking Principals," prepared by the Highway Research Board in 1971.

Based on the review of the parking in the Central Business District, it appears that there are adequate parking spaces in the Study area. However, the major deterrent to future growth in the area is that available parking areas are scattered throughout the Central Business District area. Simply stated, parking is not concentrated in sufficient numbers where the demand is the greatest,

Church and Commerce Streets. Although it is extremely expensive, additional parking structures are needed to accommodate future parking demands in the Church-Main and Commerce Streets corridor as this area continues to be revived.

OPTIONS FOR ADDITIONAL PUBLIC PARKING

The City has undertaken an agressive campaign to increase public parking capacity through the clearance of lots and the construction of decks. The new parking deck adjacent to the Radisson Hotel now accommodates three hundred-forty vehicles and can be enlarged to provide six hundred additional parking spaces. A second option is to enlarge the old City parking deck by two levels.

OVERVIEW OF PAST PLANNING EFFORTS IN THE CENTRAL BUSINESS DISTRICT

The Central Business District of Lynchburg has experienced in the past many of the problems which confront urban cities; it has experienced a relative and in some sectors an absolute decline in business activity and a substantial amount of deterioration. In the past, a number of plans for the Central Business District have addressed the need for a significant improvement in commercial activities within Downtown Lynchburg.

1934 Lynchburg City Plan

In the 1934 "Lynchburg City Plan", the Planning Commission stated the following:

"Automobile parking on thoroughfares is a problem for which there is no easy solution. Stores in the business section can assist their customers to find parking space by requiring their own cars and the cars of their employees not to park in the congested area. Reasonable parking time limits should be enforced. The factories of Lynchburg employing large numbers of people could help matters considerably by providing off-street parking space for their employees' cars."2

The Planning Commission further stated that "very little can be accomplished with the original narrow streets in high value districts. The parking problem is acute, and thought should be given to some method of providing space at convenient distances from the business district."

Although the Planning Commission did not make any specific recommendations to resolve the problems of narrow streets and parking, it is important to note that these two problems, identified forty-eight years ago, have been cited in almost every planning report prepared since for the Central Business District. The conclusion today is the same as reached by the Planning Commission in 1934 that there is no easy solution to the problems of narrow streets and inadequate parking.

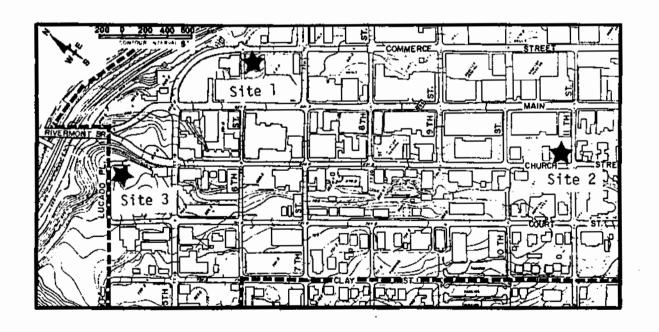
1951 Annex to Parking and Traffic, A Plan for Downtown Lynchburg

George W. Barton, Associated Consultants, prepared the Report "Annex to Parking and Traffic, A Plan for Downtown Lynchburg" for the Retail Merchants Association in 1951. The purpose of this Report was to propose a program for expanded parking facilities and a method for financing the facilities. The following three sites were identified where new parking facilities could be constructed (Exhibit 13):

- Site 1 Southeast corner of Sixth and Commerce Streets - three levels, 419 vehicles
- Site 2 Northwest corner of Eleventh and Church Streets - two levels, 144 vehicles
- Site 3 Southeast corner of Fourth and Church Streets - surface parking, eighty-five vehicles

In order to finance the proposed parking facilities, the Report recommended that 200 additional parking meters be installed in the Central Business District area; raise the parking meter rates on Main Street and side streets between Main and Church Streets; and the revenues received in excess of the 1950 base year be used to finance the parking program. Although the City did not construct any of the proposed parking facilities, Sites 1 and 2 are presently used for private parking; and consideration should be given to incorporating them into any new development plans for the Central Business District.

Exhibit 13 Off-Street Parking Program, 1951 Proposed Site Location



5. PARKING STRUCTURES

In downtown Lynchburg, there is a perceived shortage of parking, yet vacant spaces can be observed in many lots. Looking forward, parking is an important factor in redevelopment, since renovation and new construction are often difficult to finance without a commitment of assigned parking spaces. However, it is important to note that new parking garages alone do not revitalize downtowns—residential, retail, entertainment and business activities do. People will be attracted to downtown for these reasons, not for new garages. People don't avoid a desirable area or setting because of tight parking (i.e., people attending Friday Cheers at the Community Market park as far away as Ninth and Commerce Streets). Having said that, new parking must be located carefully to be sensitive to the historic fabric and to the gateway views of the city from the bridges.

The parking study reveals that certain zones downtown have shortages, while other areas have surpluses (see Appendix). The projections for future parking account for all proposed Master Plan land use changes, including new development, renovation and reuse of vacant space, and the removal of surface lots for new construction. New parking spaces are proposed to satisfy demand within each zone, and these parking structures and lots are incorporated into the final Master Plan.

The analysis addresses the relationship between parking demand and parking supply. The parking study also addresses the fact that steep slopes affect people's perception about convenient parking. Similarly, the street environment can affect people's perceptions so that vacant ground-floor buildings or extensive surface parking lots can make a journey seem longer. Shared use of parking, between nighttime and daytime, and between weekday and weekend, is accounted for in the parking generation estimates. The overall goal for downtown is to encourage more active ground-level uses (particularly in retail), renovate vacant buildings, and infill new buildings whenever possible.

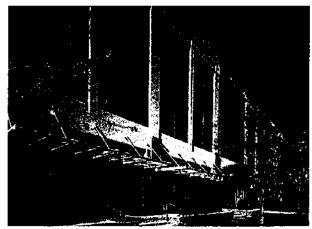
The key locations for new parking structures are identified on Figure 5 and the economics and siting issues are discussed as follows.

5.1 Jefferson and Eighth Street Parking Garage

The proposed parking garage at Eighth and Jefferson is a strategic first-phase project that will enhance redevelopment of the J. W. Ould Building, Amazement Square, Riverviews Lofts and the Wachovia Tower. The structure could range from 200 to 675 spaces, and be built into the hillside to minimize visual impact, especially from the John Lynch Bridge and from Amazement Square. Adjacent to Amazement Square, the structure should not be more than four levels. The upper levels should be set back to allow the retail section and parking entry along Ninth Street to stand out. This will provide lower-cost space as an incentive for retail uses in the initial phases.

As an economic model, we have analyzed a prototypic 450-space, abovegrade parking garage. In addition, this parking facility has the potential to

generate revenue through retail leases at the ground level.



Garages should contribute to the character of the street.

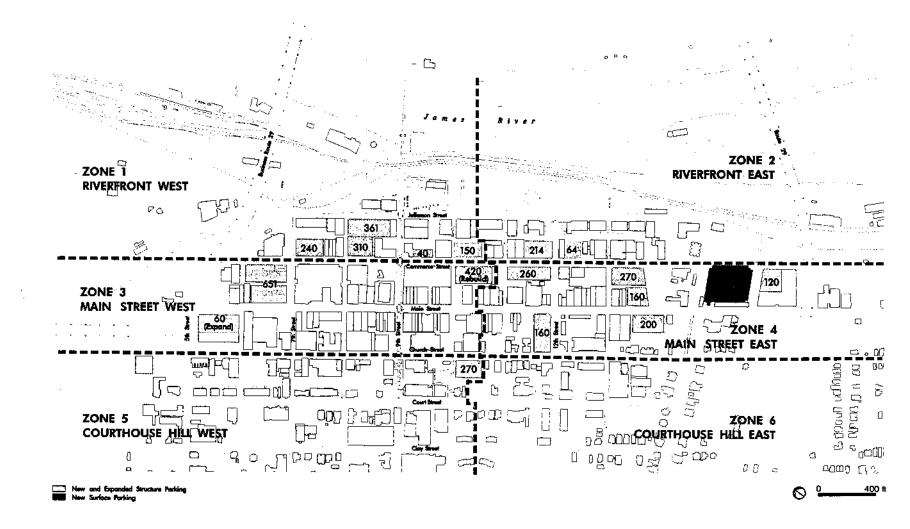


Figure 5. Potential Parking Sites

Program and Operating Assumptions

- Assumes construction by public sector (Parking Authority) using below-market interest rates through financing mechanism such as Industrial Revenue Bonds.
- Estimated development costs of \$10,000 per space, or \$4.5 million with a maximum cost per space of \$13,250 to break even.
- Assumes daily parkers use 35% of spaces, with 65% used by those who contract for parking on a monthly basis.
- Assumes achieving a rate of \$50/month for monthly parking and \$8/day for daily parking to break even or be profitable (current rates are \$40/month and \$3/day).

Feasibility and Economics

- Estimated annual revenue potential of \$358,000 supports a development cost of about \$6 million, or \$13,250/space to break even.
 (Retail rents at this stage are expected only to cover operating expenses and amortize tenant improvements, not contribute to net operating income.)
- Increasing the proportion of spaces allocated to monthly parking leases will negatively affect the project's financial feasibility. Daily parking is the primary revenue generator.
- If monthly parking rates cannot exceed \$40/month, and daily rates cannot exceed \$3/day, then a higher annual utilization will need to be achieved (90% instead of 70%) to break even.

5.2 Commerce Street Parking Garages

Commerce Street will continue to serve as a major service road, providing good access to a series of parking structures on both sides of the street. On the south side, larger structures can be built into the hillside and connect directly to the back of buildings along Main Street, where parking demand is heavy. On the north side of the street, different types of structures are proposed to provide parking for the residential and mixed uses along Jefferson Street and the Lower Bluff Walk. Approximately 2,800 additional parking spaces could be accommodated in this corridor in a number of new structures that are sited to replace surface parking lots with more efficient use of downtown land. This is a twenty-year goal.

The Master Plan proposes that the existing garage at 1001-1021 Commerce Street (Webb Parking) be considered for redevelopment at some point in the future to maximize the use and the aesthetics of this prime parking site behind Main Street. The current garage contains 250 spaces on three floors, while a newer garage will accommodate 420 spaces on five floors, similar to the adjacent City parking structure.

In order to satisfy the demand from GE Financial Assurance and other offices on Main Street West, the Master Plan proposes a 650-car garage between GE Financial Assurance and the Academy of Music. This structure will replace 180 surface-parking spaces and will allow for street-level retail uses on Main Street and $3\frac{1}{2}$ levels of parking that step up the hillside. Since they will operate at different times of day, the office uses and the Academy of Music offer opportunities to share parking.

5.3 Main Street Parking Garages

Along Main Street, most of the vacant lots are too small to accommodate a reasonable-size parking structure and the existing buildings should be retained to promote the historic character of downtown. The primary opportunities for new parking along Main Street are an expansion of the existing structure adjacent to the downtown hotel and new structures at the east end of downtown where grades drop off near Horseford Street.

The Holiday Inn parking structure was designed for half a deck more of parking, which would add 60 cars in this critical location where parking demand is highest. At the eastern gateway into downtown, two new parking structures can be accommodated on either side of Main Street near Horseford. One of these garages could house the new James River Welcome Center so that visitors arriving in downtown could see an immediate destination, park their cars before entering the heart of downtown, and continue their explorations on foot. The ice rink proposed at Twelfth and Main Streets could hold as many as 160 cars on the lower level if this structure is built at least partially into a hillside.

Along Main Street, it may be possible to remove the back portion of some of the retail buildings to provide parking and service in the center of the block. The facade and valuable retail frontage would remain (see Section 9.8).

5.4 Church Street Parking Garage

To satisfy parking demand generated by City Hall and the Courthouse expansions, a new parking garage is proposed for the 1000 Block of Church Street. This 270-car parking structure will be built into the hillside with four levels, maintaining visibility of some of the historic buildings on Court Street. The site is currently occupied by a vacant office building that will need to be removed. The design of the Church Street structure must respond to the presence of the cobblestone-surfaced Tenth Street, exploring opportunities to make pedestrian connections from the various garage levels. This garage would replace the garage that has been proposed next to the City Elevator, providing an alternative location that is larger in size and that preserves opportunities to create a pocket park at the base of the elevator.

5.5 Facade Improvements on Existing Garages

Certain garages in the downtown require aesthetic improvements. These improvements will integrate the parking structures into the character of the surrounding historic buildings, look friendlier and safer, and send a message of pride and care in the downtown. In some cases these improvements are cosmetic, while in others the long-term solution should be redevelopment to maximize the amount of parking spaces while also upgrading appearance. Cosmetic changes involve the replacement of chain link fence with ornamental fence, tree planting to mitigate the scale of garage structures, and the application of paint on concrete and railings, using a palette of colors that is compatible with the brick and wrought iron character of the historic buildings. The key garages downtown requiring these aesthetic improvements include the City-owned garage on Commerce Street, the Webb parking garages on Commerce Street and Tenth Street, on Church Street between Tenth and Eleventh Street, and the YMCA parking garage.



APPENDIX A: PARKING ANALYSIS

In downtown Lynchburg, there is a perceived shortage of parking yet vacant spaces can be observed in many lots downtown. Looking forward, parking is an important factor in redevelopment, since renovation and new construction are often difficult to finance without a commitment of assigned parking spaces. New parking must be located carefully to be sensitive to the historic fabric and to the gateway views of the city from the bridges.

The parking study reveals that certain zones downtown have severe shortages, while other areas have large surpluses. This relates to the issue of public versus private parking areas and the fact that because of the shortages in particular zones, much of the space in the city-owned garages in those areas is leased out to private interests, limiting public access. The future parking analysis accounts for all proposed Master Plan land use changes, including new development, renovation and reuse of vacant space, and the removal of surface lots for new construction. New parking spaces are proposed to satisfy demand within each zone, and these parking structures and lots are incorporated into the final Master Plan.

The analysis addresses the relationship between parking demand and parking supply, which is the amount of available spaces. The parking study also addresses the fact that steep slopes affect people's perception about convenient parking. Similarly, the street environment can affect people's perceptions so that vacant ground floor buildings or extensive surface parking lots can make a journey seem longer. The overall goal for downtown is to encourage more active ground level uses, particularly in retail, renovate vacant buildings, and infill new buildings whenever possible.

Parking Zones

As a part of this analysis, the downtown is divided into six zones organized to reflect a convenient five-minute walking distance. Because of the slopes, these zones are elongated along the Jefferson Street Corridor, the Main Street Corridor, and the Court Street Corridor. The middle of the block between Tenth and Eleventh Streets is designated as the centerline dividing the eastern half and the western half of downtown (see Figure 1: Parking Zones). The objective of the study is to analyze the balance of parking supply within each zone under existing conditions and to project new parking supply based on proposed renovation and new development under future conditions.

Existing Parking and Land Use Data

The parking analysis utilized data from the City regarding existing property ownership and use and existing parking supply. Based on field analysis and the property description, the Consultant team assigned a land use category to each property, differentiating ground floor use from upper floor use where appropriate. Each property was also assigned a zone: Riverfront West, Riverfront East, Main Street West, Main Street East, Courthouse Hill West and Courthouse Hill East. The data were then sorted by zone and by use to create a chart showing total floor area for each land use category in each zone (see Table 1). The parking data provided detailed information about type (leased, customer, employee, or public) and anecdotal information about occupancy levels. Each parking lot and parking structure was also sorted by zone to analyze the relationship to land uses in each zone.

Table 1: Existing Square Footage Per Zone

	Rivertront	Riverfront	Main Street	Main Street	Courthouse	Courthouse	TOTAL	
Use	West	East	West	East	Hill West	Hill East	EXISTING	% of total
	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	
Government	0	0	78,744	38,263	130,459	5,559	253,025	6%
Hotel	0	0	136,925	45,178	0	0,	182,103	4%
Institutional	29,600	5,760	0	46,476	<i>7</i> 0, <i>7</i> 13	88,825	241,374	5%
Manufacturing	12,700	0	48,520	0	0	.0	61,220	1%
Office	59,507	59,021	850,942	119,116	153,507	42,966	1,285,060	29%
Residential	0	4,908	11 <i>7</i> ,970	45,431	53,972	26,426	248,707	6%
Retail	17,877	14,571	155,288	141,896	11,372	15,100	356,105	8%
Warehouse	1 <i>7</i> 1,343	72,328	68,196	185,934	7,344	132,980	638,125	14%
Vacant	366,377	250,544	140,928	251,814	100,725	33,630	1,144,019	26%
TOTAL	657,404	407,132	1,597,514	874,109	528,093	345,486	4,409,738	100%

Parking Ratios

The parking analysis assumes that all existing building occupants within each land use category (office, government, retail, manufacturing, etc.) are finding adequate parking somewhere downtown and that transit usage is not driven by a lack of downtown parking. Parking ratios were adjusted to model the existing conditions (Table 2). Without adjustment, the analysis of land uses downtown using standard parking ratios would indicate a deficit of approximately 700 parking spaces downtown, assuming a maximum realistic occupancy of 90% to account for turnover. Using adjusted rates to model existing conditions, the analysis models a surplus of about 1,000 spaces throughout the downtown area, suggesting an actual occupancy rate of approximately 75% (reference Table 5). Future parking ratios are slightly higher than existing to reflect the blended effect of ongoing use of existing buildings and more efficient use of new and renovated buildings. (Note the analysis assumes occupancy by Wachovia of approximately 95,000 gsf, since the space is still under lease and in the future will be reused as office. At three spaces per 1,000 gsf, the Wachovia space creates a demand for approximately 300 spaces).

The adjustment to the demand ratio used for office space is the most sensitive variable and is based on the actual number of office employees downtown per 1,000 square feet of downtown office space. The typical ratio ranges from 2.0 to 4.0 employees per 1,000 square feet, while in Lynchburg, there are only about 1.4 to 1.5 office employees per 1,000 square feet of office space. The analysis translates each employee into a parking space assuming little use of other transportation modes and little car-pooling.

Another major adjustment was in parking spaces required for retail. The standard demands about three per 1,000 square feet of retail space downtown, however that assumes mostly "destination" retail where patrons will drive to a place just for the retail uses. In Lynchburg, most retail directly serves downtown office workers who would park in the morning for work and then walk to their retail destination. The retail demand ratio was accordingly reduced to one space per 1,000 square feet. Similarly, residential parking demand is relatively low since most of the existing residential uses in downtown Lynchburg are elderly and handicapped (the Virginian Apartments) single room occupancy or group houses that tend to have lower car ownership rates.

Table 2: Existing and Projected Parking Ratios

Land Use	Adjusted/Existing Conditions Parking Ratios	Standard/Future Conditions Parking Ratios		
Government	2.5	3.0		
Hotel	1.0	1.0		
Institutional	0.2	0.2		
Manufacturing	1.0	1.0		
Office	1.5	2.0		
Residential	0.5	1.25		
Retail	1.0	3.0		
Warehouse	1.0	1.0		

Note: All ratios are per 1,000 gross square feet except for hotel and residential which are per unit.

Existing Parking Supply and Domand

Using the adjusted parking ratios, the parking demand for existing land uses by zone is modeled in Table 3 and existing parking supply downtown based on actual data is shown in Table 4. These charts as well as the summary of parking surplus and deficit provided in Table 5 shows the imbalance of parking in the different downtown zones. The Main Street West zone has the highest concentration of office uses, and therefore the greatest parking demand, with 2/3 of the downtown office floor area, including GE Financial Assurance/First Colony Life and many of the downtown banks. Although there is a considerable amount of parking in this area, overall there is a slight deficit of parking supply, with the implication that this demand is being filled in other adjacent zones such as Riverfront West and Courthouse Hill West, where there is a surplus of parking. The Main Street East area, which contains the Community Market, shows parking at almost full capacity, replicating reports that it is difficult to park close to the Market at peak times (Saturday morning market and Friday Cheers). The Riverfront East Zone and the Courthouse Hill East Zone show slight surpluses and may provide some overflow for the demand along Main Street East.

Table 3: Existing Parking Demand by Zone (Using Adjusted Parking Ratios)

	Riverfront	Riverfront	Main Street	Main Street	Courthouse	Courthouse	TOTAL
Land Use	West	East	West	East	Hill West	Hill East	Existing
i	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)
Government	-	•	197	96	326	14	633
Hotel	•	-	277	92			369
Institutional	6	1		9	14	. 18	48
Manufacturing	13	-	49		-	-	61
Office	119	89	1,276	179	230	64	1,928
Residential	-	16	71	13	26	20	145
Retail	18	15	155	142	. 11	15	356
Warehouse	171	72	68	186	7	133	638
TOTAL	297	192	2,094	716	615	264	4,177

Table 4: Existing Parking Supply by Zone

Type of	Rivertront	Riverfront	Main Street	Main Street	Courthouse	Courthouse	TOTAL	% of
Parking	West	East	West	East	Hill West	Hill East	Existing	Total
	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	
Structured	0	0	1,677	. 0	508	80	2,265	39%
Surface	351	225	469	696	654	353	2,748	48%
Street Parking	131	122	140	161	147	62	<i>7</i> 63	13%
TOTAL SUPPLY	482	347	2,286	857	1,309	495	5,776	100%
@90%	434	312	2,057	<i>7</i> 71	1,178	446	5,198	

Table 5: Existing Parking Surplus & Deficit

Parking Ratios	Riverfront West (spaces)	Riverfront East (spaces)	Main Street West (spaces)	Main Street East (spaces)	Courthouse Hill West (spaces)	Courthouse Hill East (spaces)	Total Surplus Spaces (spaces)
Surplus/ (Deficit) Using Adjusted Ratios	137	120	(36)	55	317	182	775
Surplus/ (Deficit) Using Standard Ratios	71	38		-	(651)	98	

Future Parking Supply and Demand

With the existing data calibrated, the analysis projects future demand by incorporating planned projects and the reuse of vacant spaces. The square footage in new structures is added to each land use category and reused vacant space is removed from the "vacant" category and placed into the appropriate land use category assuming renovation. Overall, the Master Plan projects approximately 287,000 gross square feet of net new space for targeted projects added to the downtown area through renovation and new development (Tables 6 and 7).

The future parking ratios are applied to the total future floor area (existing plus new and reused) for each of the land use categories and then tallied according to zone to indicate future parking demand generation based on the Master Plan. This translates into a future demand of approximately 8,500 spaces (Table 8).

The Master Plan seeks to balance parking supply and demand within each zone to the extent practical. In some cases, adjacent zones must be considered together to achieve this balance since some zones downtown can accommodate more parking than others. Table 10 indicates that the future supply will approximately balance the future demand with only a deficit of approximately 700 spaces. In order to achieve this balance, the Master Plan accommodates more than 4,000 new parking spaces downtown, primarily in structured parking garages (Table 9). Most of these new structures are proposed for the Riverfront West and the Main

Street East and West, where projected demand is the highest. These parking structures should be phased in to keep pace with renovations and new development, which are projected to change from 3.2 million gsf occupied space to as much as 4.7 million gsf occupied space.

On the west side of downtown, the intense demand for parking in the office buildings along Main Street will result in an ongoing deficit in this area. The excess parking spaces further up the hill near the Courthouses can satisfy this demand, although some convenience will be lost. Opportunities to increase parking in the Main Street West and the Riverfront West zones are limited by the number of available building sites and by the objective of minimizing the visual impact of the parking garages, which limits their overall height. The parking study suggests that the proposed parking garage adjacent to the Hill Brothers building is strategically located as a first phase project, since it will be critical to increasing supply in the Main Street West Zone. This structure is projected for approximately 600 to 700 spaces, although the more detailed design study now underway may prove the feasibility of increasing the amount of parking in this location.

Table 6: Projected Net Square Footage of New and Reused Space

	Rivertront	Rivertront	Main Street	Main Street	Courthouse	Courthouse	NET TOTAL
Use	West	East	West	East	Hill West	Hill East	New/Reused
	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)
Government	10,584	•		10,000	(6,920)	-	13,664
Hotel		25,776	-	(45,178)	•	-	(19,402)
Institutional		-	8,712	8,908	-		17,620
Manufacturing	(12,700)	-	•		<u> </u>	-	(12,700)
Office	65,313	116,732	109,853	246,456	60,775	13,111	612,240
Residential	262,198	261,836	•	4,786	94,528	87,201	710,549
Retail	45,751	76,540	15,474	36,807	(4,278)	(10,900)	159,394
Warehouse	(101,934)	5,760		(50,812)	(4,278)	(23,308)	(174,572)
Vacant	(312,150)	(239,504)	(124,039)	(218,722)	(91,941)	(33,630)	(1,019,987)
TOTAL	(42,938)	247,140	10,000	(7,755)	47,886	32,474	286,806
# of							
Residential	i i						
Units	140	115	-	4	63	<i>7</i> 0	392

Table 7: Total Future Land Use (Existing plus New and Reused)

	Riverfront	Rivertront	Main Street	Main Street	Courthouse	Courthouse	TOTAL	
Use	West	East	West	East	Hill West	Hill East	FUTURE	% of total
	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	(gsf)	
Government	10,584	•	<i>7</i> 8,744	48,263	123,539	5,559	266,689	6%
Hotel	•	25,776	136,925	-	_	-	162,701	3%
Institutional	29,600	<i>5,7</i> 60	8,712	55,384	<i>7</i> 0, <i>7</i> 13	88,825	258,994	6%
Manufacturing	-	•	48,520	•	•	•	48,520	1%
Office	124,820	1 <i>75,75</i> 3	960,795	365,572	214,282	56,077	1,897,300	40%
Residential	262,198	266744	117,970	50,217	148,500	113,627	959,256	20%
Retail	63,628	91,111	170,762	178,703	7,094	4,200	515,500	11%
Warehouse	69,409	78,088	68,196	135,122	3,066	109,672	463,553	10%
Vacant	54,227	11,040	16,889	33,092	8784		124,032	3%
TOTAL	614,466	654,272	1,607,514	866,354	575,979	377,960	4,696,544	100%
# of				· <u>·</u> ·				
Residential								
Units	160	156	142	30	114	109	711	

Table 8: Future Parking Demand (Using Standard/Future Demand Ratios)

land Use	River-front West (spaces)	River-front East (spaces)	Main Street West (spaces)	Main Street East (spaces)	Court-house Hill West (spaces)	Court-house Hill East (spaces)	TOTAL FUTURE (spaces)
Government	32		236	145	371	17	800
Hotel	-	52	277		-	-	330
institutional	6	1	2	11	14	18	52
Manufacturing			49	366		•	414
Office	250	352	1,922	731	66	112	3,432
Residential	200	195	178	38	143	136	889
Retail	787	234	512	536	21	13	2,103
Warehouse	69	78	108	135	3	110	504
TOTAL	1,343	912	3,284	1,961	618	405	8,524

Table 9: Future Parking Supply

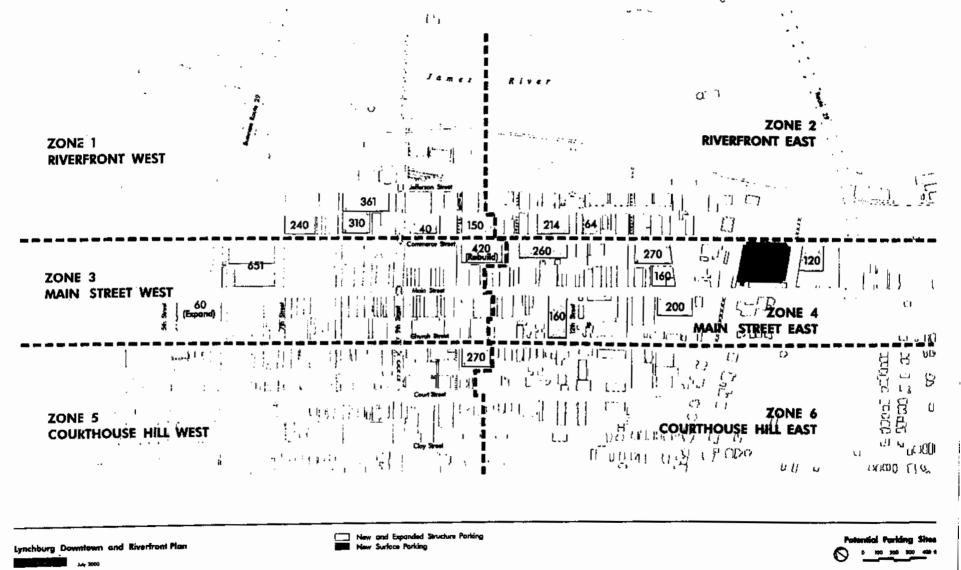
Type of	Riverfront	Rivertront	Main Street	Main Street	Courthouse	Courthouse	TOTAL
Parking	West	East	West*	East	Hill West	Hill East	Supply*
i	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)	(spaces)
Existing							
Structure	o	0	1,677	0	508	80	2,265
New Structure	1,101	278	1,131	1,170	270	0	3,950
Total							
Structured	1,101	278	2,558	1,170	<i>7</i> 78	80	5,965
Surface	68	114	228	524	524	470	1,928
Street Parking	131	122	140	161	147	62	<i>7</i> 63
TOTAL							
FUTURE	1						
SUPPLY	1,300	514	2,926	1,855	1,449	612	8,656
@90%	1,170	463	2,633	1,670	1,304	551	<i>7,7</i> 90

^{* &}quot;Total Structured" is less than the sum of "Existing" and "New Structure" because the new structured parking count includes the replacement of 250 structured spaces removed from the demolition of an obsolete garage. In the "Total Supply column, the 250 is not included so the Existing and New add up to the total future supply.

Table 10: Summary of Future Surplus & Deficit

	Riverfront West (spaces)	Riverfront East (spaces)	Main Street West (spaces)	Main Street East (spaces)	Courthouse Hill West (spaces)	Courthouse Hill East (spaces)	TOTAL Future (spaces)
Future Supply	(op area)	(45-554)	(0)2000)	(4)	(4)	(4) ====7	
@ 90%	1,1 <i>7</i> 0	463	2,633	1,670	1,304	551	<i>7,</i> 790
Future							
Demand	1,343	912	3,284	1,961	618	405	8,524
Future							
Surplus/							
(Deficit)	(173)	(449)	(651)	(291)	686	146	(734)

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ASSUMPT	IONS/FACT	\$													
	Demand			Adjusted				1						1	
	Ratio/			Demand Ratio		Ì	i	l .						}	
	Future			for existing				1							
∐se.	Targets ²	per	units	Uses ¹	per	units		Residential/H	otel Conversi	ons*:				i	l
Gov't	3		gsf	2.5	1000	gsf		369	hotel rooms						
fotel			гоот	1	1	room		182,103	gsf for hotel						
nstitutional	0.2	1000	gsf	0.2	1000	gsf ·		494	gsf/room						
Manufact.	i	1000		1	1000	gsf		L		L					
Office	2	1000	gsf	1.5						nits (includes s	ingle family, o	parlments and	d shelters)		
Residential	1.25		unit	0.5		ursit			gaf for res.	L					
Retail	3	1000	gsf	1	1000				avg. gst/uni				<u> </u>		L
Warehouse	1	1000	gsf	1	1000					ct number of	units was used	instead of th	is estimate as	new units adde	d were
Ratios Ad	usted to reflec	type of hous	ing, non-dest	ination retail and	limited ware	shouse use.		around 1,300	gsf each.						
Using thes	standards, th	ne data show	a deficit of 1	,953 spaces.				<u>L</u>							
V 2	1														
AND US	BY ZONE	(GSF)													
Entered in the	Sales (1980) 34	da Riverti	at West	A Phresing	et Lant Afr			7				1,000,11,000			
A STAN STANCE		1988	Future with	27.100.27.1	Future with		Future with		Future with	1	Future with		Future with	TOTAL	TOTAL
Jse		Existing	Existing	Existing	Existing	Existing		Existing				Existing	Existing	EXISTING	FUTURE
Governmen	 		10,584			78,744	78,744	38,263	48,263	130,459	123,539	5,559	5,559	253,025	266,689
fotei	<u> </u>	·	-	-	25,776	136,925	136,925	45,178						182,103	162,701
Institutional		29,600	29,600	5,760	5,760	<u> </u>	8,712	46,476	55,384	70,713	7 0,713	88,825	88,825	241,374	258,994
Manufactur	ina	12,700		-	-	48,520	48,520	·-		<u> </u>			-	61,220	48,520
Office		59,507	124,820	59,021	175,753	850,942	960,795	119,116	365,572	153,507	214,282	42,966	56,077	1,285,060	1,897,300
Residential			262,198	4,908	266,744	117,970	117,970	45,431	50,217	53,972	148,500	26,426	113,627	248,707	959,256
Retail		17,877	63,628	14,571	91,111	155,288	170,762	141,896	178,703	11,372	7,094	15,100	4,200	356,105	515,500
Worehouse		171,343	69,409	72,328	78,088	68,196	108,956	185,934	135,122	7,344	3,066	132,980	109,672	638,125	504,313
		366,377	54,227	250,544	11,040	140,928	16,889	251,814	33,092	100,725	8,784	33,630		1,144,019	124,032
Yacant		1467 404	61A.466	34407,132	2°654,27.2	\$1597.51A									
Vocant	TO THE WAY IN	Charles Andrews Control													
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Book State			Future with		Future with		Future with	1	Future with		Future with		Future with		TOTAL	
50		Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	FUTURE	
			32		-	236	236	115	145	391	371	17	17	759	800	
overnment lotel	<u>'</u>		-		52	277	277	92					_	369	330	
						-	2	9	11	-14	14	18	18	48	52	
stilutional		13			· · · ·	49	49		366				•	61	414	
Aanufacturi	ing	119	250	118	352	1,702	1,922	238	731	307	66	86	112	2,570	3,432	
)lfice	<u> </u>		200	39	195	178	178	33	38	64	143	49	136	361	889	
esidential*		54	787	44	234	466	512	426	536	34	21	45	13	1,068	2,103	_
etail	<u> </u>	171	- 769	72	78	68	109	186	135	7	3	133	110	638	504	
Varehouse	l	1/1						(A)(8)		7.5			1. 1.	45.		
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	<u> </u>	<u> </u>							 -						 	\vdash
MAND	(Spaces) wi	th Adjusted	Kattos					<u> </u>	$\vdash -$							
				23.2128e=1.1			ntailings to the account	P	-275.		The part of	¥3/700	F (775)			
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			Future with	1	LOIDIG MINI	Existina	Existing	Existing	Existing	Existing		Existing	Existing	TOTAL	FUTURE	
Jse		Existing	Existing	Existing	Existing	197	197	96	121	326	309	14	14	633	667	
Sovernment	·		26			277	277	92	- '-	H		<u> </u>	— · · · · ·	369	330	
total					52		2//		11	14	14	18	18	48	52	
nstitutional		6	6	1	!	49	49	├─ ─ <u></u>	366			<u>.</u>	- '0	61	414	—-
Manufacturi	ng	13	L			1,276	1,441	179	548	230	50	64	84	1,928	2,574	
Office		89	187	89	264		71	1/7	15	26	57	20	55	145	356	
lesidentiai		-	80	16	78	71		142	179	11	7	15	4	356	714	
Retail		18	262	15	91.11	155	171		135		3	133	110	638	504	
(171	69	72	7B.	68	109	186	135	1.00			110	038	304	<u> </u>
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PARKING	SUPPLY (Sp	aces)						<u> </u>	<u> </u>	ļ. <u> </u>	<u> </u>		├	ļ	<u> </u>	
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	i .	Existing	Future	Existing	Future	Existing	Future	Existing	Future	Existing	Future	Existing	Future	Existing	Future	SPACE
	 	LAISIII N	1101	0	278	1677	2558					BC			5965	37
Structured	 -	351	1	225	114	469	228	696	524	654	<u> </u>	353				
Surface	⊥ _	131	131		122		140	161	161	147		62	62	763	763	
Street Parki					514		2926		1855	1309	1449	495	612	5776	8656	2
TOTAL SU	PPLY	482	1300	20Mate/312			- 3 - 1									
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Summary: Supply /	AND DEMAND) using 90% (Capacity	1	NEW SPACES N	IEEDED (not at 90%)		 -			 	<u> </u>
	Existing Surplus/(Defic			(Deficit)			STRUCTURED		SURFACE			
Zone				Standard	Zone	Existing		TOTAL	Existing	Future [w/Existing]	TOTAL Removed	
Riverfront West	137		539	(173)	Riverfront West	0	1101	1101		68		
Riverfront East	120	38	(102)	(450)	Riverfront East		278	278	225		12001	
Main Street West	(36)	[818]	317	(651)	Main Street West	1677	2558	1131			1-1-1	
Main Street East	55	(327)	295	(292)	Main Street East		1170					
Courthouse Hill West	317	(651)	864	686	Courthouse Hill W	VA44 500					(172)	
Courthouse Hill East	182			146	Courthouse Hill Ed		778	270	654	524	(130)	
							80.	<u> </u>	353	470		
OTAL	775	(1,688)	2,180	(734)	TOTAL	2265	5965	3950	2748	1928	4====	
	l				* The Main Street	West Total New spaces is	higher than t	he difference	h-1		(020)	